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Risky Sexual Behaviour among University Students

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Authors' contributions

This work was written and carried out in collaboration all the authors. All authors read and approved the final manuscript.

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ABSTRACT

Introduction: Early sexual debut, having multiple sex partners, and non-use of condoms are some of the risky sexual behaviors among young people that makes them vulnerable to many health problems such as sexually transmitted infections (STIs), human immunodeficiency virus (HIV) and acquired immune deficiency syndrome (AIDS).
Methods: A cross-sectional quantitative survey was utilized in this study. Eight hundred and fifty nine undergraduate students were surveyed in classrooms selected through a stratified random sample procedure. Data was collected using a self-administered questionnaire in a class room situation. The questionnaire included the Health and Behaviour Survey, National College Health Risk Behavior Survey and the Global School Health Survey.
Results: The results showed that male students were more likely to report having had more than one sexual partner. However, they were more consistent in condom use compared to female students. The study also revealed that students in the fourth (final) year were more likely to report having experienced sexually transmitted infections than those in the first year.
Conclusion: The study revealed that having multiple sex partners increased with advancement in

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university years attained with more males likely to report having had more than one sexual partner. Consistent condom use was generally low with students in the senior years reporting to have contracted an STI.

Keywords: Sexual behavior; risky behavior; university students; STI.

1. INTRODUCTION

The population in sub-Saharan Africa comprises of 20 percent young people in the age group of 14 to 24 [1] and Zambia has approximately 74 percent of its 14 million total population under the age of 30 [2]. Healthy young people are a very important part of any society, their vigor, and their resourcefulness drive the development of a nation.

Young people seem to be involved in risky sexual behavior e.g. early sexual debut, having multiple sex partners, and non-use of condoms. This makes them vulnerable to many health problems such as sexually transmitted infections (STIs), human immunodeficiency virus (HIV) and acquired immune deficiency syndrome (AIDS) [3-7]. Global statistics have shown that 45% of new HIV infections occurred among youths ages 15-24 [8] and in Zambia, HIV prevalence rate is 8.7% among girls aged 15-24 and 4.3% among boys of the same age [9].

A number of studies conducted in Africa among young people on condom use have shown varying results. A University study in Ethiopia showed that 26.9% to 34.2% of students ever had sexual intercourse, 45.2% had more than one sexual partner and 59.4% had first sex at high school [10]. In Cameroon many young people change sexual partners often but condom use still remains low [11]. However, at a Nigerian University, of the 55% students who were sexually active, seventy per cent of the men used condoms during sex [12].

The Zambia Sexual Behaviour Survey showed that among young respondents reporting sexual activity in the 12 months prior to the survey, two thirds of adolescents aged 15-19 and one third of young adults aged 20-24 reported having sex with a non-marital, non-cohabitating partner, and of these respondents, only 32% of adolescents and 41% of young adults used a condom the last time they had sex with a non-regular partner [13]. Zambia has put deliberate efforts to reduce risk sexual behaviours of young people using different strategies, activities and policies at the national level. However, most related interventions target the general public as a result they do not directly respond to higher education institution students needs and expectations. Since literature suggests high risky sexual behaviour among young people at higher education learning institutions, the purpose of this study was to explore the sexual behaviours of students at a University in Zambia.

2. METHODOLOGY

2.1 Sample and Sampling

This study utilised a cross-sectional quantitative survey. Eight hundred and fifty nine undergraduate students were surveyed in classrooms selected through a stratified random sample procedure. A university department formed a cluster and was used as a primary sampling unit. A list of departments and numbers of students registered for undergraduate courses in each department was obtained. One department was randomly selected from each faculty. For each selected department, undergraduate courses offered by the department were randomly ordered, with larger classes having greater probability of being near the beginning of the list and smaller classes having greater probability of being near the end.

Data was collected by a self-administered questionnaire in a class room situation in the presence of one of the researchers, a trained research assistant, after informed consent had been obtained. All of the students present in class on the day of the survey were invited to participate.

2.2 Measures

The questionnaire included the Health and Behaviour Survey designed as a broad survey of health-related behaviours and beliefs, components of the “National College Health Risk Behavior Survey” and the Global School Health Survey. The risk-knowledge items that were analyzed for this paper, included questions about risky sexual behavior.

2.3 Data Analysis

Statistical Package for Social Sciences version 12 (SPSS v 12) was used for data analysis. Cross tabulations were used to examine the relationship between the frequency of condom use and socio-economic and demographic variables. For the statistical analysis, chi-square tests of independence were conducted at the bivariate level, and the differences were determined at $P < 0.05$ significant levels.

2.4 Ethical Issues

The study was cleared by the Social Sciences Ethics committee at the University of Zambia. Informed consent was obtained from participants prior to data collection. Participation was voluntary and research data obtained from participants was computer coded with a number to ensure confidentiality.

3. RESULTS

3.1 Sample Characteristics

The majority of the respondents were in the age group 21-24 (42% of males and 44% of females). Respondents from year 1 constituted 52% females and 58% males while 48% of females and 42% of males were from year 4. The majority of the respondents were single (87% females and 82% males). The sample further indicates that majority of the participants were from Protestants (73% females and 69% males). 55% and 66% of the females and males lived on campus, respectively. On the family background, 60% and 40% of the females and males were from a quite well off background, respectively followed by not well off (33% females and 35% males) (Table 1).

3.2 Sexual Behaviour

The percentage of respondents who reported number of partners have had sex in the past year is shown in Table 2. Respondents whose age group was 25 and above were more likely to report having had one sexual partner during the past year (83% females and 62% males) on the contrary 12% and 24% of females and males in the age group 21-24 reported having had more than two sexual partners in the last 12 months.

About 39% of females and 27% of males from year one reported having had one sexual partner. In year 4, the number of participants who reported having had one sexual partner significantly increased to 64% females and 50% of males. Similarly, 7% of females and 18% of males in year one reported having had more than two partners during the last one year which significantly increased to 12% of females and 21% males in year 4 (Table 2).

Table 1. Sample distribution

	Female (%)	Male (%)
Age		
15-20	40.1	31.2
21-24	44.2	41.7
25+	15.7	27.2
Year of study		
Year 1	52.3	57.9
Year 4	47.7	42.1
Marital status		
Married	12.9	17.8
Single	87.1	82.2
Religion		
Protestant	72.7	68.5
Catholic	27.3	31.5
Current residence		
On campus	54.5	65.9
Off campus	45.5	34.1
Family background		
Quite well off	59.6	40.1
Not very well off	32.6	35.5
Quite poor	7.8	24.4

About 88% and 65% of married female and male respondents, respectively reported having had one sexual partner during the last one year while 10% and 17% of married females and males reported having had two or more sexual partners during the last one year. On the other hand, 45% and 31% of single females and males reported having had one sexual partner during the last year while 9% of females and 21% of males reported having had two or more partners during the last year.

3.3 Consistency in Condom Use

The percentage of respondents who reported frequency of condom use with their partners is shown in Table 3. Thirty seven percent (37%) of female respondents aged 21-24 reported that they consistently used a condom every time they had sex. On the contrary 62% of male respondents aged 15-20 reported that they consistently used a condom every time they had sex. Single respondents (33% females and 45% males) were more likely to report having consistently used a condom every time they had

sex compared to married respondents (21 females and 20% males). On campus respondents (33% females and 40% males) were more likely to report having used a condom consistently every time they had sex compared to students from off campus (27% of females and 37% males).

3.4 Sexually Transmitted Infections

Results as presented in Table 4, indicate that those who had used condom less than half of time had an average of 3.44 times more likely to report having diagonised with STI compared to those who had used condom every time (average 2 times).

4. DISCUSSION

The results in this study show that students aged 25 and above were more likely to report having had one sexual partner during the past year as opposed to those in the age group 21-24 who reported having had more than two partners in the last 12 months. Similar to a study by Siegel et al. [14] this study found that senior students reported having had more than one partner during the last year. The findings on students having multiple sexual partners were generally lower compared to the findings noted in Bahir Dar city amongst private college students [15] Gonder [16]. However the findings of this study are similar to studies at Haramaya [17] and Jimma University [18] reporting a lower rate of ever had multiple sexual partners.

We found that males compared to females were more likely to report having had more than one sexual partner. Similar results have been reported in Nigeria among selected university undergraduate students at the Olabisi Onabanjo University where it was found that premarital sexual permissiveness attitudes were favourable among male students than female students [19]. A study by Ngoma and Himoonga [20] at the University of Zambia found that female respondents had more sexual partners compared to their male counterparts. This disparity could be due to sample differences.

Table 2. Percentage of respondents who reported number of partners have had sex in the past year

	Female				Male			
	One partner	**Two or more partners**	**X^2**	**P**	**One partner**	**Two or more partners**	**X^2**	**P**
Age								
15-20	34.5**	8.0**	30.80	.000	26.2**	13.8**	26.51	.000
21-24	50.4	12.4			32.6	23.9		
25+	83.3	4.8			61.8	16.2		
Year of study								
Year 1	38.5**	6.6**	25.87	.000	26.8**	18.1**	18.68	.000
Year 4	63.6	12.1			50.0	21.4		
Marital status								
Married	87.5**	10.0**	28.49	.000	64.6**	16.7**	19.60	.000
Single	44.6	9.4			31.1	20.7		
Religion								
Protestant	49.2	9.6	4.46	.481	41.9	16.9	3.63	.163
Catholic	57.5	8.2			30.7	25.3		
Current resident								
On campus	51.1	8.5	1.661	.719	34.4	19.4	2.90	.234
Off campus	52.9	10.7			44.2	20.8		
Family background								
Quite well off	51.7	8.8	1.39	.994	37.4	24.2	3.94	.414
Not very well off	50.0	10.7			43.6	17.9		
Quite poor	55.0	10.0			31.6	17.5		

**Significant at P< 0.05, **Highly Significant P< 0.001*

Table 3. Frequency of condom use with their primary partners

	Female					Male				
	Less than half of the time	Occa-sionally	Every time	X^2	P	Less than half of the time	Occa-sionally	Every time	X^2	P
Age										
15-20	26.7**	53.3**	20.0**	23.28	.000	6.9**	31.0**	62.1**	22.09	.000
21-24	20.2	42.9	36.9			26.7	41.7	31.7		
25+	57.9	15.8	26.3			49.1	19.3	31.6		
Year of study										
Year 1	25.4	46.0	28.6	1.96	.375	28.8	25.8	45.5	2.92	.232
Year 4	33.0	35.7	31.3			33.3	34.5	32.2		
Marital status										
Married	66.7**	12.8**	20.5**	33.91	.000	63.4**	17.1**	19.5**	26.10	.000
Single	19.1	47.8	33.1			20.2	35.1	44.7		
Religion										
Protestant	30.6**	38.7**	30.6**	1.23	.982	32.0	28.0	40.0	1.98	.610
Catholic	27.1	41.7	31.3			32.7	34.6	32.7		
Current residence										
On campus	20.7*	46.7*	32.6*	8.48	.014	24.0*	36.5*	39.6*	8.88	.018
Off campus	40.5	32.1	27.4			43.9	19.3	36.8		
Family background										
Quite well off	27.7	39.6	32.7	1.89	.756	31.1	29.5	39.3	1.24	.994
Not very well off	37.0	35.2	27.8			33.3	29.4	37.3		
Quite poor	30.8	46.2	23.1			28.6	31.4	40.0		

**Significant at P< 0.05, **Highly Significant P< 0.001*

Table 4. Mean number of respondents who reported having been diagnosed with a sexually transmitted infection by frequency of condom use

Frequency of condom use	Female			Male		
	Mean	F	P	Mean	F	P
Less than half of time	3.44	0.394	0.351	3.59	.0425	.661
Occasionally	2.56			2.33		
Every time	2.00			1.98		

When the respondents were asked on condom use, this study found that consistence incondom use was generally lower compared to other studies [15,17] where 48% - 81% of consistent condom use is reported. This may be because of dynamism of young people's behaviour, difference in knowledge on risky sexual behaviours, reproductive health issues and skills of condom use. We also found that on campus students were more likely to report having used condoms consistently every time they had sex compared to students from off campus. Ojedokun and Balogun [19] report that students who rent a room off campus indulge in risky sexual activities more than those staying on campus. They go on to say that these results are expected because of restrictions on campus such as limits on social parties, drinking, etc. But in most cases private accommodation are not as restrictive. Other types of accommodation (such as staying with parents or relatives) are significant for low risk but not for high risk [21].

Condom availability is necessary, but does not automatically lead to widespread usage thereof. Pettifor, MacPhail, Rees and Cohen [22] found that for many adolescents, access to and knowledge of condoms did not translate into condom use. Peltzer [23], suggest that psychosocial correlates such as attitudes, beliefs, social influence and self-efficacy of heterosexual condom use influence condom use and condom use intention. In other studies Higher self-efficacy of condom use has been found to be positively related to past condom use and intention to use condoms [23].

The present study also revealed that students from the fourth year were more likely to report having experienced sexually transmitted infections compared to those from the first year. From our experience as academicians and HIV related service providers, one of the factors that could explain this outcome is understanding the reason for contraceptive use. Whether it's done for the prevention of disease or pregnancy. Siegel et al. [14] explains this by suggesting that as young adults advance through college, they become more sexually active, and increase their use of oral contraceptives (OCPs), while condom use remains low as focus shifts on pregnancy prevention as the stated purpose of contraceptive use. This is in concurrence of the results if the current study which suggests that the fourth year were more likely to report having experienced sexually transmitted infections compared to those from the first year. Siegal et al. [14] further go on to say that this choice was more common among the upperclassmen than underclassmen. This focus on pregnancy prevention might have an effect on efforts to address their individual HIV risk.

5. CONCLUSION

The present study has revealed that having multiple sex partners increases with advancement in university years with more males likely to report having had more than one sexual partner. Consistent condom use is generally lower with students in the senior year reporting to have contracted an STI. Our findings underline the need to address the issues concerning sexual behavior, use of contraception, disease prevention, and STI and HIV/AIDS risk among students in universities, including an appreciation of the behavioral and decision-making differences that might exist across the 4 years of University life. This information might be useful in designing and implementing sexual risk-reduction programs in university-based health care services.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. UN: World Youth Report. Young people's transition to adulthood – progress and challenges. New York; 2007.
2. UNFPA: Annual Report. Delivering Results in a World of 7 Billion. New York; 2011.
3. Malow RM, Devieux J, Jennings T, Lucenko BA, Kalichman SC. Substance abusing adolescents at varying levels of HIV risk: Psychosocial characteristics, drug use and sexual behavior. J Subst Abuse. 2001;13(1-2):103-17.
4. UNICEF/WHO. Young people and HIV/AIDS: Opportunity in crisis. Progress for children: Achieving the MDGs with equity. New York, UNICEF; 2010.
5. Nalwadda G, Mirembe F, Byamugisha J, Faxelid E. Persistent high fertility in Uganda: Young people recount obstacles and enabling factors to use of contraceptives. BMC Public Health. 2010;10:530.
6. Eaton L, Flisher AJ, Aaro LE. Unsafe sexual behaviour in South African youth. SocSci Med. 2003;56(1):149–165.
7. Agardh A, Cantor-Graae E, Ostergren PO. Youth, sexual risk-taking behavior and mental health: A study of university students in Uganda. Int J Behav Med. 2012:19(2):208–216.
8. UNAIDS/WHO.AIDS Epidemic Update. Geneva; 2009.
9. UNESCO. Sexuality Education for Youth – Key in Preventing the Spread of HIV in Zambia. Education Sector; 2014. Available:http://www.unesco.org/new/en/education/resources/onlinematerials/singleview/news/sexuality_education_for_youth_key_in_preventing_the_spread_of_hiv_in_zambia/#.VZ4o5_lKVBI
10. Mulu W, Yimer M, Abera B. Sexual behaviours and associated factors among students at Bahir Dar University: A cross sectional study. Reproductive health. 2014;11(1):84.
11. Dominique M, Silva M, Klein M. Determinants of condom use among youth in Madagascar. K4 Health; 2011. Available:http://www.k4health.org/es/system/files/WP55.pdf
12. Olley BO, Rotimi OJ. Gender differences in condom use behaviour among students in a Nigerian University. Afr J Reprod Health. 2003;7(1):83-91.
13. Central Statistical Office, Ministry of Health, University of Zambia & MEASURE Evaluation. Zambia Sexual Behaviour Survey 2009, Lusaka, Zambia, CS0 and Measure Evaluation; 2010.
14. Siegel MD, Klein ID, Roghmann JK. Sexual behavior, contraception and risk

among college students. Journal of Adolescent Health. 1999;25(5):336–343. DOI: 10.1016/S1054-139X(99)00054-3
15. Anteneh ZA. Prevalence and correlates of multiple sexual partnerships among private college students in Bahir Dar city, Northwest Ethiopia. Sci J Public Health. 2013;1(1):9-17.
16. Gelibo T, Belachew T, Tilahun T. Predictors of sexual abstinence among WolaitaSodo University Students, South Ethiopia. Reprod Health. 2013;10:2-6.
17. Dingeta T, Oljira L, Alemayehu T, Akililu A. First sexual intercourse and risky sexual behaviors among undergraduate students at Haramaya University, Ethiopia. Ethiop J Reprod Health. 2011;5(1):22-30.
18. Ojedokun AO, Balogun SK. Gender differences in premarital sexual permissiveness among university undergraduates. Sabinet, Online Journal. 2008;6(1):1651–1672. Available:http://www.sabinet.co.za/abstracts/genbeh/genbeh_v6_nl_al5.xml
19. Somba MJ, Mbonile M, Obure J, Mahande MJ. Sexual behaviour, contraceptive knowledge and use among female undergraduate students of Muhimbili and dares Salaam Universities, Tanzania: A cross sectional study. BMC Womens Health. 2014;14:94.
20. Ngoma CM, Himoonga UM. Gender differences in sexual behaviours among students at the University of Zambia, Lusaka. Africa Journal of Nursing and Midwifery. 2010;12 (2):27-35.
21. Mturi JA, Gaearwe L. Gender differences in sexual behaviour amongst university students in Mahikeng, South Africa. African Population Studies. 2014;28(1).
22. Pettifor A, MacPhail, C, Rees H, Cohen M. Young people's sexual health in South Africa: HIV prevalence and sexual behaviours from a nationally representative household survey. AIDS. 2005;19(14): 1525-1534.
23. Petzer K, Oladimeji Y, Morakinyo O. Factors affecting condom use among Nigerian University Students. ZJER. 2001;13(3):283-301.

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